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A NEW GENUS OF GYMNOTID EELS FROM THE PERUVIAN AMAZON.

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In a large collection of fishes from the Rio Ampiyacu and the vicinity of Pevas, recently made for the United States National Museum by Mr. William G. Scherer, I find a single specimen which appears to represent an unusual new genus of Gymnotid eels.

ŒDEMOGNATHUS, new genus.

Genotype.—*Œdemognathus exodon,* new species.

This genus is similar to *Porotergus* in most respects. It has large fontanels, a caudal fin, a dorsal filament, teeth in both jaws, a short blunt snout, eyes covered with skin, a naked back, and large oblique scales along the middle of the sides. The two known species of *Porotergus* (Ellis, *Mem. Carnegie Mus.*, vol. 6, no. 3, 1913, p. 152) both have the teeth small and few, and apparently confined to the normal place on each jaw. *Œdemognathus,* on the other hand, has the dentigerous portion of the premaxillaries greatly expanded and bulbous, most of it not opposable to the lower jaw, and the upper portion of it rising above the profile of the snout. The whole of this bulbous area is studded with many strong, slightly curved, conical teeth, placed irregularly and not very closely together. Most of the teeth therefore project forward, outward, or upward, and are entirely outside the mouth. The dentigerous portion of the lower jaw is also bulbous and enlarged, but not nearly so much so as that of the upper. The lower teeth are similar to the upper ones in shape, and are numerous and arranged irregularly, but none is outside the mouth and all point in the normal direction. Gape rather short, not reaching to below eye.

Œdemognathus exodon, new species.

Holotype.—U. S. N. M. 102040, a specimen 202 mm. in total length, collected in the Rio Ampiyacu, Eastern Peru, December 14, 1935, by Wm. G. Scherer.

Body extremely compressed. Depth of head at occiput nearly equal to its length (without premaxillary expansion). Anus directly below the

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very tiny eye. Profile of head sloping down greatly from occiput to snout, posteriorly gently curved to origin of filament. Ventral profile nearly straight behind anal origin. Snout heavy and truncate; without the bulbous dentition it is much like that of *Porotergus gimbeli*. Gape rather straight, but maxillary inclined at about 45 degrees from horizontal. Mouth not quite reaching to below eye. Lower jaw very deep and heavy.

Pectorals very large, nearly as long as head (less premaxillaries), with rays 16 in number, the first one short and spine-like, the last one very short. Anal fin high, the rays half way between head and dorsal filament equal to two-thirds greatest body depth. Dorsal filament long but inconspicuous when in its trough along back. Caudal fin doubtless present, but the type has had the end of the tail injured and it is therefore impossible to describe the caudal or be sure of the number of anal rays. Anal rays probably over 200; at least 193 still remain countable.

Scales along middle of sides large and very oblique, like those of *Porotergus gimbeli* and unlike those of *P. gymnotus*. Lateral line conspicuous and apparently complete.

Measurements in millimeters.—Total length 202. Greatest depth 20. Greatest thickness (temporal region) 7.5. Thickness of body behind head 5. Predorsal length (tip of snout minus premaxillary to beginning of free part of dorsal filament) 108. Length pectoral fin 19. Total length head (including premaxillary) 21. Length snout (minus premaxillary) 6. Diameter eye 2.5. Length free portion dorsal filament 60.

Discussion.—Many of the differences between this fish and *Porotergus gimbeli* are of the type that might be expected to be of secondary sexual importance only, but others, such as the very tiny eye, the high anal, the much greater number of anal rays, and the smaller gape, make me believe that *Œ. exodon* has nothing to do with that species. Further, no such sexual differences are known to occur in the Gymnotids.

The classification of the Gymnotid genera allied to *Apteronotus* (*Sternarchus*) is not yet entirely settled. The enlargement of the middle body scales in certain species may be of more importance than the characters heretofore used. The difference between *Porotergus gymnotus* and *P. gimbeli* in the size and obliqueness of the scales, as figured (but not described) by Ellis, is great and may be of generic value. *Œdemognathus* has large oblique scales, but it is so different from all other Gymnotids in the dentition that I feel little hesitation in regarding it as a distinct genus.

It should be called to attention that *Sternarchella sima* Starks (*Fishes of the Stanford Expedition to Brazil, Stanford Univ. Publ., Univ. Ser.*, 1913, p. 22, pl. 4; Pará) was omitted from Ellis' monograph of the Gymnotids. Further, *Tateichthys duidæ* La Monte (*Amer. Mus. Novit.*, No. 373, 1929, p. 1; vicinity Mt. Duida), of which I have examined a paratype through the courtesy of Miss La Monte, possesses the mental filaments and is a synonym of *Steatogenys elegans* (Stdr.). It has apparently not before been noticed in print that these extraordinary mental "filaments" of *Steatogenys* occur not only in the paired canals on the chin, but also run back in a closed tube behind the pectoral base and up to the scapular region, where they again reach the surface; both ends of each "filament" are free. The use of these organs remains a mystery.